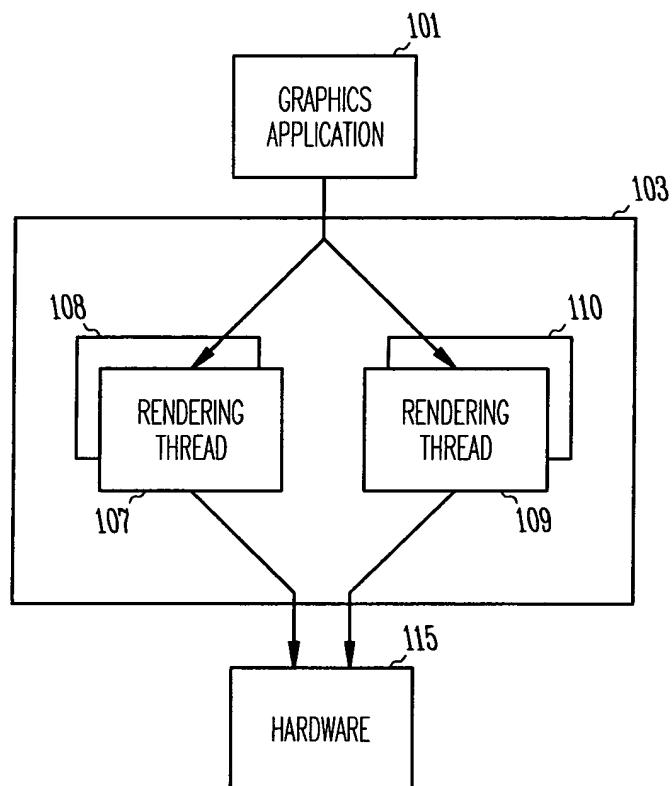TITLE: EFFICIENT DETECTION OF TEXTURE SHARING BETWEEN MULTIPLE CONTEXTS
INVENTOR'S NAME: Bimal Poddar
SERIAL NO.: 09/672,954   DOCKET NO.: 884.895US1

1/4

Fig. 1

TITLE: EFFICIENT DETECTION OF TEXTURE SHARING BETWEEN MULTIPLE CONTEXTS
INVENTOR'S NAME: Bimal Poddar
SERIAL NO.: 09/672,954 DOCKET NO.: 884.895US1

2/4

200

201
CPU

205
MEMORY SUBSYSTEM

207
CACHE MEMORY

203 209 215 217 221

209
INPUT INTERFACE

215
STORAGE

217
GRAPHICS SUBSYSTEM

211
KEYBOARD

213

219

Fig.2

TITLE: EFFICIENT DETECTION OF TEXTURE SHARING BETWEEN MULTIPLE CONTEXTS
INVENTOR'S NAME: Bimal Poddar
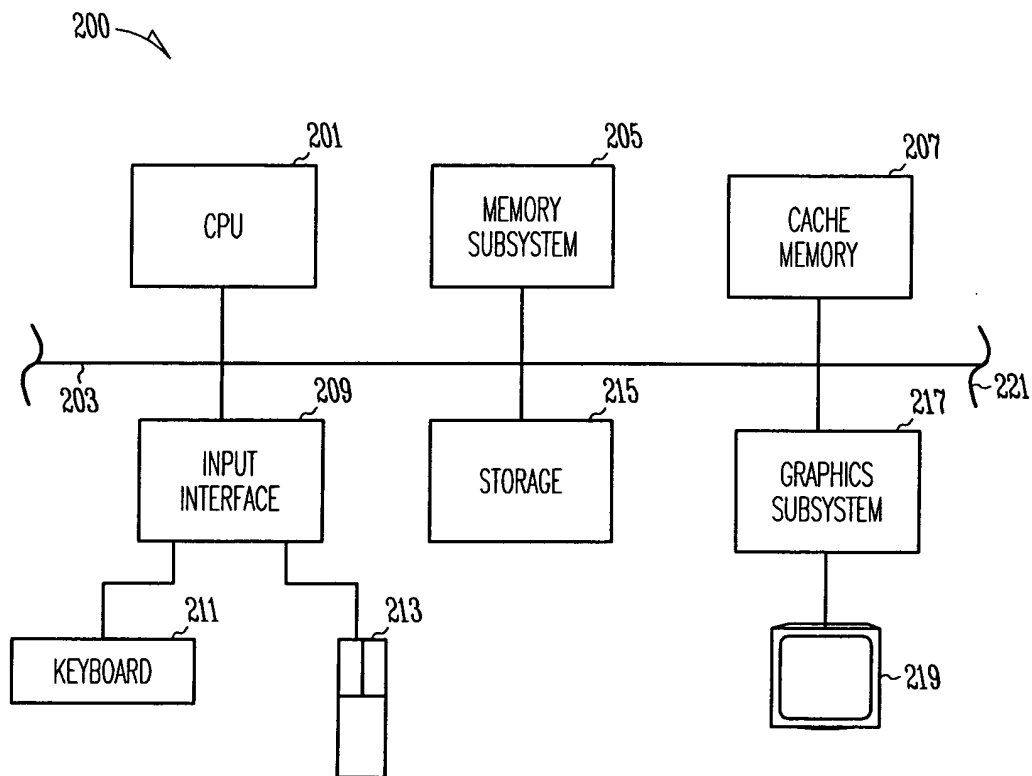SERIAL NO.: 09/672,954 DOCKET NO.: 884.895US1

3/4

CONTEXT 2
CONTEXT ID = 0x10

TEXTURE A
REF COUNT = 2
TEXTURE USAGE
MASK = 0x11

TEXTURE B
REF COUNT = 2
TEXTURE USAGE
MASK = 0x01

CONTEXT 1
CONTEXT ID = 0x01

MULTIPLE TEXTURE
UNITS

Fig.3

TITLE: EFFICIENT DETECTION OF TEXTURE SHARING BETWEEN MULTIPLE CONTEXTS
INVENTOR'S NAME: Bimal Poddar
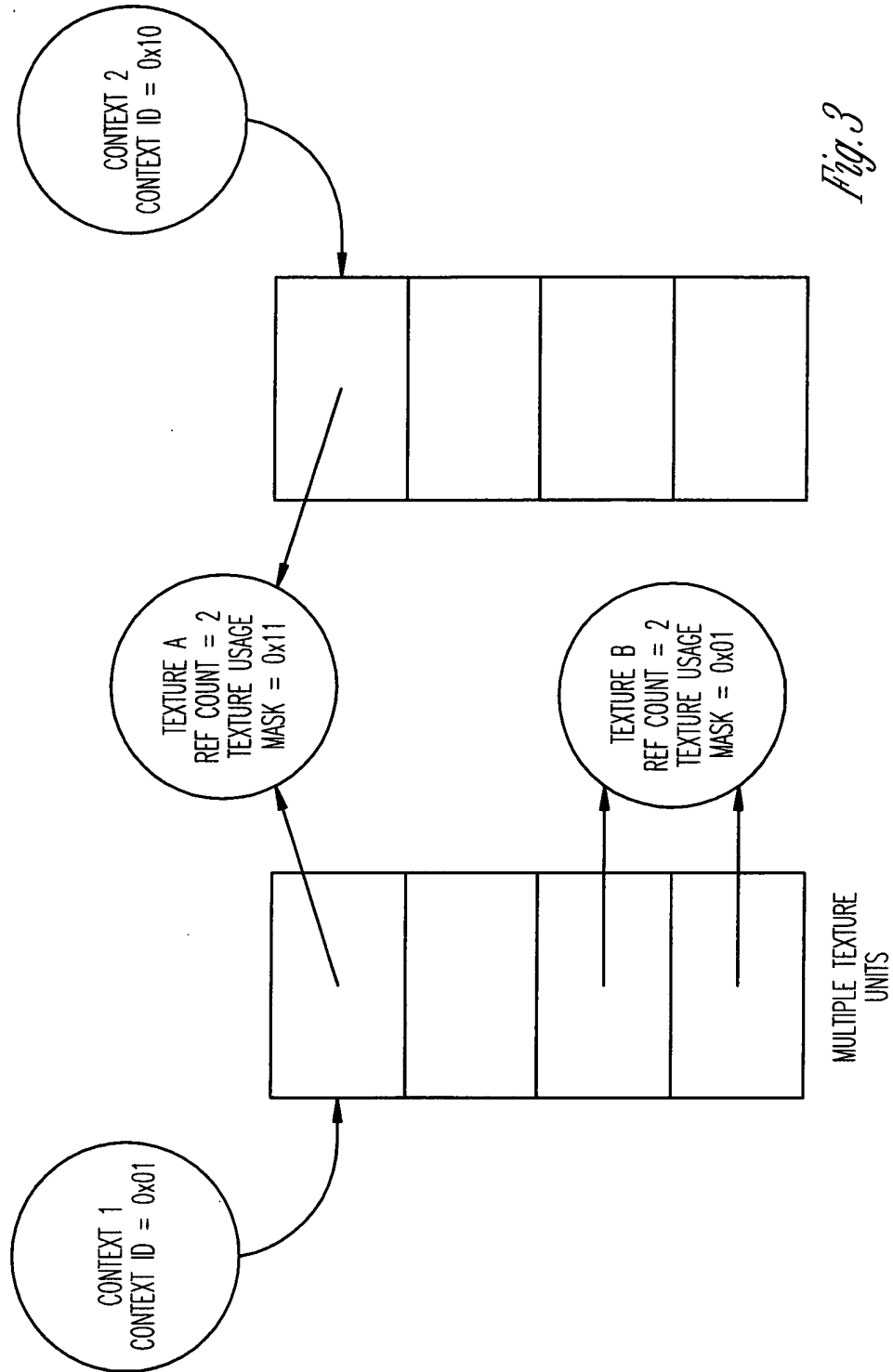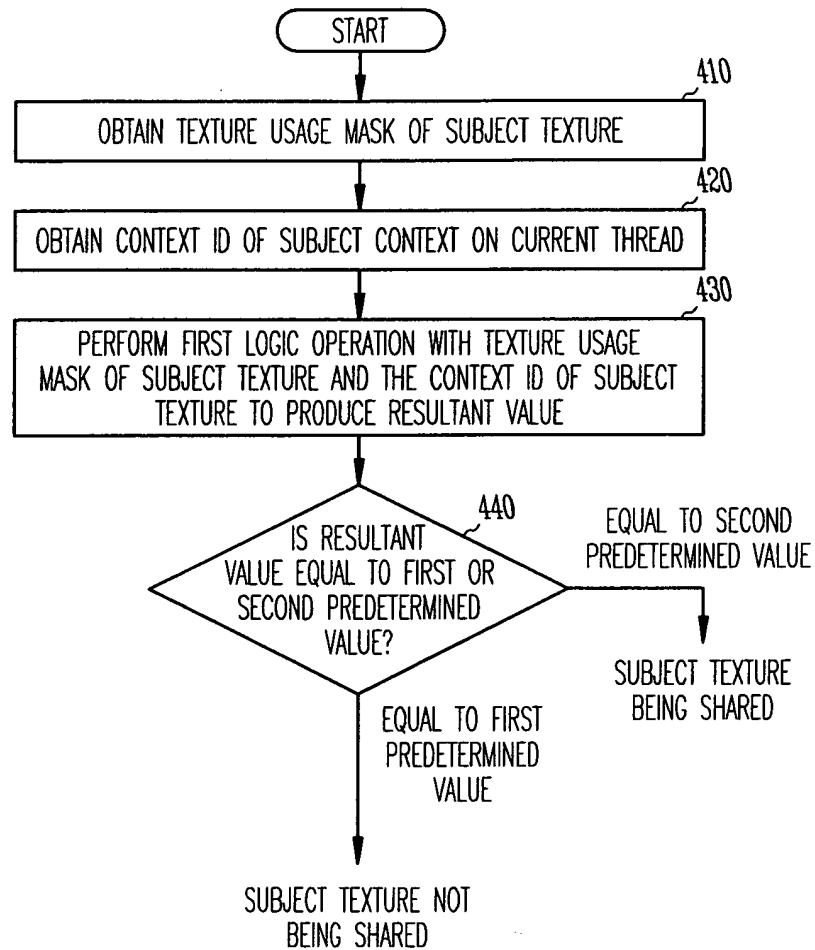SERIAL NO.: 09/672,954 DOCKET NO.: 884.895US1

4/4

START

OBTAIN TEXTURE USAGE MASK OF SUBJECT TEXTURE — 410

OBTAIN CONTEXT ID OF SUBJECT CONTEXT ON CURRENT THREAD — 420

PERFORM FIRST LOGIC OPERATION WITH TEXTURE USAGE MASK OF SUBJECT TEXTURE AND THE CONTEXT ID OF SUBJECT TEXTURE TO PRODUCE RESULTANT VALUE — 430

IS RESULTANT VALUE EQUAL TO FIRST OR SECOND PREDETERMINED VALUE? — 440

EQUAL TO SECOND PREDETERMINED VALUE

SUBJECT TEXTURE BEING SHARED

EQUAL TO FIRST PREDETERMINED VALUE

SUBJECT TEXTURE NOT BEING SHARED

Fig. 4